

REPLACEMENT SHEETS

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CLAIMS

What is claimed is:

1. A method of creating a liner in a borehole having an interior wall and located in a subterranean formation comprising:

5 circulating settable material into the borehole wherein the settable material sets on at least a portion of the interior wall of the borehole to create a liner along the wall of the borehole;

agitating the settable material inside the borehole between the interior wall of the borehole and a drill string to prevent the settable material from setting in the center
10 of the borehole; and

removing excess settable material out of the borehole before the settable material has completely set.

2. The method of claim 1 wherein the settable material comprises high-strength cement containing steel or carbon fibers.

15 3. The method of claim 1 wherein the agitation preventing the settable material from setting is from the circulation of the settable material.

4. The method of claim 1 wherein the agitation preventing the settable material from setting is from the movement of the drillstring.

5. The method of claim 4 wherein the agitation preventing the settable material
20 from setting further includes agitation from a shearing device located on the drillstring.

6. The method of claim 1 wherein the removing excess settable material includes circulating the settable material out of the borehole before the settable material has completely set.

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7. The method of claim 1 wherein the removing of excess settable material includes drilling and circulating the excess settable material out of the borehole before the settable material has completely set.

8. The method of claim 1 further comprising drilling the borehole after the excess
5 settable material has been removed.

9. The method of claim 8 further comprising reaming the borehole as the borehole is being drilled.

10. The method of claim 8 further comprising producing hydrocarbons from the borehole.

10 11. A method of creating a casing in a borehole with an interior wall located in a subterranean formation, comprising:

(a) drilling a borehole with a drill bit on a drill string;

(b) placing settable material into an annulus within the borehole to a desired fill height wherein the settable material sets on at least a portion of the interior
15 wall of the borehole to create a liner along the at least the portion of the interior wall of the borehole;

(c) moving the drill string to prevent the settable material from completely plugging the borehole; and

(d) circulating drilling mud containing a set retarder to remove the unset
20 settable material near the drill string.

12. The method of claim 11 further comprising repeating steps (c) and (d) until the lining has hardened

13. The method of claim 11 further comprising repeating steps (a) through (d) until the borehole has been drilled to the desired distance with a cast-in-place liner.

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14. The method of claim 11 further comprising continuing drilling the borehole with a drill bit on a drill string after the unset settable material has been removed.

15. The method of claim 14 further comprising reaming the borehole as the borehole is being drilled.

5 16. The method of claim 11 further comprising producing hydrocarbons from the borehole.

17. A method of creating a borehole liner having an interior wall located in a subterranean formation, comprising:

providing a sacrificial liner inside the borehole to create an annular space
10 between the sacrificial liner and the interior wall of the borehole, wherein there are no pipes inside the sacrificial liner;

circulating settable material into the borehole outside the sacrificial liner wherein the settable material occupies at least a portion of the space between the sacrificial liner and the interior wall of the borehole to create a liner between the
15 sacrificial liner and interior wall of the borehole;

drilling out at least a portion of the liner and at least a portion of the sacrificial liner to create the borehole liner, wherein the borehole liner has a hollow core inside the borehole; and

continuing drilling of the borehole beyond the sacrificial liner with a drill bit
20 on a drill string after the sacrificial liner has been drilled out.

18. The method of claim 17 wherein the sacrificial liner comprises a liner formed from a plastic material.

19. The method of claim 17 further comprising reaming the borehole as the borehole is being drilled.

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20. The method of claim 17 further comprising producing hydrocarbons from the borehole.

21. The method of claim 17 wherein the sacrificial liner is an easily drillable material with a tensile strength of less than 448 Mpa (65,000 psi).

5 22. The method of claim 17 wherein the sacrificial liner is an easily drillable material with a tensile strength of less than 172 Mpa (25,000 psi).

23. The method of claim 17 wherein the sacrificial liner is an easily drillable material with a tensile strength of less than 103 Mpa (15,000 psi).